

A new freshwater gobi (Pisces: Gobiidae) from Lake Sibayi, Zululand, South Africa

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Lake Sibayi, some 40,000 hectares in extent, is situated on the coastal plain of Zululand and is separated from the sea by forested dunes rising to a height of 180 metres. It has a depth of 40 metres, however, the surface is 22 metres above sea level. Although the lake is at present a freshwater system, past association with the sea is evinced by the marine affinities of much of its fauna. (Allanson *et al*, 1966).

Three gobies have been found in the lake: the ubiquitous *Glossogobius giuris* (Ham.-Buch.); *Croilia mossambica* Smith, a new locality record; and a species of *Silhouettea* Smith, 1959, here described as new.

***Silhouettea sibayi* sp.n.** (Figure 1).

Diagnosis. Both sexes may be distinguished from *Silhouettea insinuans* Smith by the naked breast. In addition, the males are characterized by the height of the dorsal fin, in excess of 2 times the body depth.

Holotype: male, 27 mm standard length, from eastern shore of Lake Sibayi (27°21'S, 32°47'E) 18.1.1966, Albany Museum No. P.F. 1100 (collectors No. SIB 13B).

Paratypes: males, 23 mm s.l., collected together with holotype, A.M. No. P.F. 1101; female, 20 mm s.l., 15.7.1965, A.M. No. P.F. 1102 (Coll. No. SIB 8Q); female, 20 mm s.l., 14.7.1967, A.M. No. P.F. 1103 (Coll. No. SIB 11B); juvenile, 12 mm s.l., 20.1.1966, A.M. No. P.F. 1104 (Coll. No. SIB 26Gb).

Additional Specimens. Colour notes were made from four additional specimens (died on route to Grahamstown, suffered delayed preservation and therefore excluded from type series) collected 20.7.1968, A.M. No. P.F. 1105 (Coll. No. SIB 104A).

Description. (Paratypes in parenthesis). Head broad, naked, somewhat depressed, 3·3 (3·1—3·5) in standard length. Eyes large, dorsal, adjacent, 4·3 (3·4—4·0) in head, exceed snout. Anterior nostril a short raised tube above lip, posterior nostril a simple pore against eye. Sensory pores and papillae of head as illustrated. Mouth terminal, oblique, reaching to below anterior margin of eye, lips pronounced, lower jaw protruding, tongue truncate. Teeth on lower jaw recurved, in inner and outer series, separated by band of minute teeth, outer series with enlarged canine-like teeth at sides of jaw (females lacking canine-like teeth), teeth on upper jaw smaller, similarly arranged. Gill-opening to below mid-operculum. Gillrakers low knobs, 1+1+10.

Dorsal VI + I 11 (juvenile V + I 11). First dorsal: height 2·4 (other male 2·2) times body depth sub-equal to snout-to-dorsal distance, first spine normal, sub-equal to body depth, 2nd, 3rd & 4th spines filamentous, tending to run together distally giving the appearance of a single filament, 2nd longest (in one additional specimen, 3rd is longest), 5th and 6th spines progressively shorter. (In females, first dorsal height 1·1 times body depth, 1st spine 1·4 in body depth, 2nd, 3rd & 4th spines normal sub-equal, 5th & 6th spines progressively shorter.) Second dorsal separate, rays sub-equal, 1·2 (1·5—1·2) in body depth.

Anal I 13, inserted slightly in advance of the second dorsal, rays sub-equal 1.3 (1.6—1.3) in body depth. Pectoral 16 (15—16), 1.4 (1.2—1.3) times body depth, reaches beyond anal origin. Pelvics fused, 6 + 6, 1.4 (1.3—1.4) times body depth, reach beyond anal origin, fraenum strong. Caudal rounded, shorter than head.

Scales ctenoid, 29 (28—29, undeveloped in juvenile), transverse 8, caudal peduncle 12, head, nape, breast and pectoral base naked.

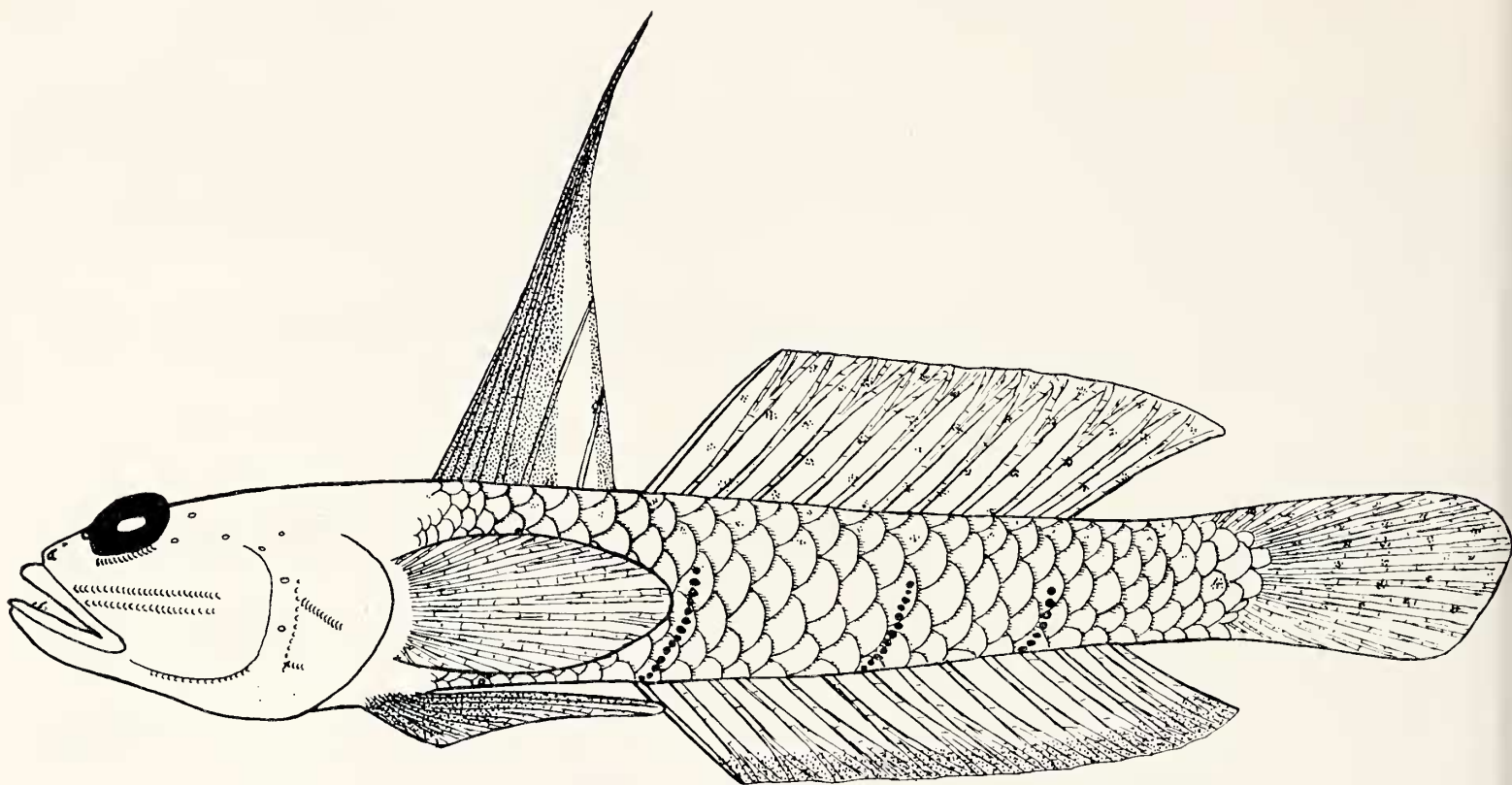


Fig. 1. *Silhouettea sibayi* sp.n., holotype, male.

Coloration: in life cryptic, pale opalescent below, above flecked with reds and browns matching the sandy substrate. Caudal and second dorsal transparent but similarly flecked. Behind the pectoral, four or five narrow, transverse rows of spots across body. Pectorals transparent, pelvics similar but with darkly pigmented base. Anal opalescent with darkly pigmented distal margin. The first dorsal in males is very darkly pigmented with a bright silvery-white sub-marginal stripe on the lower posterior half of the fin. First dorsal in females similar to the second dorsal, not distinctive as in males. In preserved specimens colours fade but darkly pigmented areas remain, as well as silvery-white stripe of males.

Habits. Collected on the sandy bottom from shallows to a depth of 5 metres, but silvery flashes of males were observed down to 11 metres. Both in aquaria and on the lake bottom, specimens were observed to bury themselves in the sand with the aid of the pectorals, the eyes remaining uncovered. In this position the dorsal fin may be erected, perhaps serving to attract prey.

Remarks. This new species runs down to *Silhouettea* Smith in Smith's (1959) key to the sub-family Gobiinae in the western Indian Ocean. It does not run out in his later (1960) key to the Gobiidae in South Africa (from which *Silhouettea* is excluded).

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